<u>**WHAT IS CLAIMED IS**</u>:

1.   A video processing system that shoots video of moving objects at a plurality of points, extracts intended scenes, and compiles the extracted scenes into a video product, the system comprising:

(a)   a plurality of video recording units, each of which comprises:

a fixed camera that captures video of each passing moving object, and

a video storage controller that stores video data including the captured video of the moving objects and time stamps that indicate at what time each part of the video was captured;

(b)   a plurality of time measurement units deployed at checkpoints, each of which measures checkpoint passage time of each passing moving object and stores checkpoint time records including the measured checkpoint passage times and identifiers of the individual moving objects; and

(c)   a video authoring unit that searches the video data stored in said video recording units to find and extract scenes of one of the moving objects, using the checkpoint time records in association with the time stamps in the video data, and compiles the extracted scenes into a video product.

2.   The video processing system according to claim 1, wherein said video authoring unit creates index files containing time stamp numbers that derive from the checkpoint time records and uses the index files to find

5   scenes of one of the moving objects that is specified.

3.   The video processing system according to claim 1, wherein said video authoring unit produces and uses a video configuration file that contains parameters

10   including at least one of video shooting section, checkpoint, and video record start time and length, whereby said video authoring unit can extract scenes in various ways.

15   4.   The video processing system according to claim 3, wherein:

two or more of said video recording units are placed around one of the checkpoints; and

using the video configuration file, said video

20   authoring unit extracts a plurality of video clip files from the video data that has been captured at said one of the checkpoints.

5.   The video processing system according to

25   claim 1, wherein said video recording units insert identifiers into the video data in association with the checkpoint passage times to identify the individual moving

objects.

6.   A video processor that retrieves motion pictures from video data using shooting time data and checkpoint passage data, the video data having been captured by a fixed point camera that is placed at a predetermined distance from a checkpoint, the shooting time data indicating at what time each part of the video data was captured, the checkpoint passage data associating a time record that indicates at what time a subject passed the checkpoint with an identifier of the subject, the video processor comprising:

a time record retrieval unit that searches the checkpoint passage data to find a time record associated with a given identifier; and

a video record retrieval unit that identifies shooting time data having a predetermined temporal relationship with the time record that is found and searches the video data for a scene that corresponds to the shooting time data identified.

7.   A video recording unit which shoots video of moving objects, comprising:

a fixed camera; and

a video storage controller that stores motion pictures of the moving objects captured by said fixed camera, together with time stamps that indicate at what

time the motion pictures were captured.

8.   The video recording unit according to claim 7, wherein said video storage controller inserts identifiers into the video data in association with the checkpoint passage times, to identify the individual moving objects.

9.   A video authoring unit which extracts intended scenes and compiles into a video product, comprising:

a video record retrieval unit that automatically searches stored video data to find and extract scenes of the moving object, using time stamps in association with checkpoint time records that include identifiers and checkpoint passage times of moving objects; and

a video compilation unit that compiles the extracted scenes into a video product.

10.   The video authoring unit according to claim 9, wherein said video record retrieval unit creates index files containing time stamp numbers that derive from the checkpoint time records and uses the index files to find scenes of one of the moving objects that is specified.

11.   The video authoring unit according to claim 9, wherein said video compilation unit produces and

uses a video configuration file that contains parameters including at least one of video shooting section, checkpoint, and video record start time and length, whereby said video compilation unit can extract scenes in
5   various ways.

12.   The video authoring unit according to claim 11, wherein said video authoring unit, using the video configuration file, extracts a plurality of video
10   clip files from the video data captured at one checkpoint.

13.   A video processing method that shoots video of moving objects at a plurality of checkpoints, extracts intended scenes, and compiles the extracted
15   scenes into a video product, comprising the steps of:

(a)   taking video of the moving objects with fixed cameras;

(b)   storing video data that includes the video of the moving objects and time stamps indicating at what
20   time each part of the video was taken;

(c)   at the plurality of checkpoints, recording passage time of each moving object;

(d)   storing checkpoint time records that include the passage times and identifiers of the moving
25   objects;

(e)   automatically extracting scenes of one of the moving object, based the checkpoint time records in

association with the time stamps in the stored video data; and

(f)   compiling the extracted scenes into a video product.

14.   The video processing method according to claim 13, wherein said extracting step (e) creates index files containing time stamp numbers that derive from the checkpoint time records and uses the index files to find scenes of one of the moving objects that is specified.

15.   The video processing method according to claim 13, wherein said extracting step (e) produces and uses a video configuration file that contains parameters including at least one of video shooting section, checkpoint, and video record start time and length, whereby said extracting step (e) can extract scenes in various ways.

16.   The video processing method according to claim 15, wherein:

two or more fixed cameras are placed around one of the checkpoints; and

using the video configuration file, said extracting step (e) extracts a plurality of video clip files from the video that has been taken at said one of the checkpoints.

17.   The video processing method according to claim 13, further comprising the step of inserting identifiers into the video data in association with the

5   checkpoint passage times to identify the individual moving objects.

18.   A sports video processing method that shoots video of a sports game or race in which

10   participating athletes change locations with time along a given course and compiles video scenes of a particular athlete into a personalized video product, the method comprising the steps of:

(a)   taking video of all the athletes along the

15   course, using video recording units each having a fixed camera which are placed at a plurality of places on the course;

(b)   storing video data that includes the video of the athletes and time stamps indicating at what time

20   each part of the video was taken;

(c)   recording passage time of every athlete who passes each of a plurality of checkpoints on the course and storing checkpoint time records that include the passage times and identifiers of the athletes;

25   (d)   out of the stored video data including the time stamps, automatically extracting scenes of each particular athlete passing the checkpoints, based on the

checkpoint time records; and

(e)   producing a personalized video product by writing the extracted scenes into a video storage medium.

5   19.   The sports video processing method according to claim 18, wherein said extracting step (d) creates index files containing time stamp numbers that derive from the checkpoint time records and uses the index files to find the scenes of each particular athlete that

10 is specified.

20.   The sports video processing method according to claim 18, wherein said extracting step (d) produces and uses a video configuration file that contains

15 parameters including at least one of video shooting section, checkpoint, and video record start time and length, whereby said extracting step (d) can extract scenes in various ways.

20   21.   The sports video processing method according to claim 20, wherein:

two or more video recording units are placed around one of the checkpoints; and

using the video configuration file, said

25 extracting step (d) extracts a plurality of video clip files from the video data that has been taken at said one of the checkpoints.

22. The sports video processing method according to claim 18, wherein further comprising the step of inserting identifiers into the video data in association with the checkpoint passage times to identify the individual athletes.